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ABSTRACT

While many black citizens support the concept of competency-based standards, it is understandable that questions are being raised about the impact of competency-based education (CBE) on black students and on goals for achieving educational equity. It must be determined whether CBE programs are egalitarian or obstructions to educational equity. This research provides information to assist citizens in making this determination. The report discusses alternative views of educational equity, including definitions that emphasize educational inputs (such as money), processes (such as teaching and organizational influences), and outcomes (such as achievement levels and job success). A CBE program based on equity considerations must include adequate human, physical, and economic resources that are organized and allocated according to equity goals and objectives and that lead to students' maximizing their academic performance and participating in social institutions. A framework for monitoring the inputs, processes, and outcomes in a CBE program is provided. (Author/IBT)

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Suite 539 • Woodward Building • 1426 H Street, N.W.
Washington, D.C. 20005 • (202) 638-4477

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THE ROLE OF COMPETENCY BASED EDUCATION IN ACHIEVING EDUCATIONAL EQUITY

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PREFACE

The Joint Center for Political Studies was funded by the National Institute of Education to conduct research on The Role of Competency Based Education in Achieving Educational Equity. This subject is of particular interest to the Joint Center in light of its mission to help blacks, other minorities and the disadvantaged in America achieve political, economic and social equity through informed and effective involvement in the governmental process.

The research was conducted by Dr. Louise E. Taylor with the assistance of Sharon Bingham, Joint Center intern. Dr. Eleanor Farrar, Vice President of the Joint Center for Political Studies, and Dr. Michael Goldstein provided technical assistance, and Lorraine McDermott contributed to the literature review.

THE ROLE OF COMPETENCY BASED EDUCATION IN ACHIEVING EDUCATIONAL EQUITY

INTRODUCTION

In 1948, Horace Mann's twelfth Annual Report to the Board of Education stated, "Education, then, beyond all other devices of human origin, is the great equalizer of the conditions of men--the balance-wheel of the social machinery." Mann's thesis was that education would increase knowledge among potential workers and instill values and behavior which are accepted by the society at large. While many public officials in the nineteenth century saw Mann's balance-wheel philosophy as a means of providing equal opportunity to participate in the growing economy, others labeled his common schools as social control mechanisms. Despite misgivings, the common school concept flourished, and public schools increased throughout the country.

The increase in the number of public schools was not, however, accompanied by a redistribution of the nation's rewards and benefits, and debates ensued about the role of schools in determining the quality of life for individuals. Katz concluded that some original advocates of public schools abdicated their responsibility for expanding opportunities through educational equity and attributed inequities to individuals' "imperfection, their vitiated constitution, or poor stock". Some schools did, in fact, maintain that the ultimate responsibility for achieving equal opportunity rested with the individual, and at least one textbook described the means to good fortune in such terms:

> If he has good health and is industrious, even the poorest boy in our country has something to trade upon; and if he, besides being well-educated, has

> some skill in any kind of work, and add to this moral habits and religious principles, so that his employers may trust him and place confidence in him, he may then be said to set out in life with a handsome capital, and certainly has as good a chance of becoming independent and respectable, and perhaps rich, as any man in the country. Every man is the maker of his own fortune (Cremin, 1951).

The debates have continued in the 20th century, and in 1972 Christopher Jencks' assessment of the effect of family and schooling in America refuted Mann's thesis on schools as equalizers in stating that schooling and test scores did not explain variation in vocational competence. Numerous research studies were conducted to explain the relationship between educational opportunity and social achievement, and several found that no minipulation of educational variables had more than a slight effect on decreasing inequality of educational opportunity or social opportunity (Mosteller, 1972).

Such reports were perplexing to black Americans who had subscribed to the major thesis in the landmark 1954 case, Brown v Board of Education.

> It is doubtful that any child may reasonably be expected to succeed in life if he is denied the opportunity of an education. Such an opportunity, where the State has undertaken to provide it, is a right which must be made available to all on equal terms. (Brown v Board of Education, 347, U.S. 483 (1954).

Kenneth B. Clark, the distinguished social psychologist who testified in the Brown case, remains convinced of the importance of education in influencing life choices (Clark, 1979).

> The fact that public schools provide criminally inferior non-education for these defenseless children and their parents, who are themselves victims of inferior education, will mean that there cannot really be a serious form of equal employment opportunity or affirmative action, that these programs will remain token because there will not be a sufficient number of youngsters who are trained in the basic academic skills to meet reasonable and rational requirements for entering high-level jobs.
>
> The public schools with their present insensitive, indifferent approach to the educational needs of these children are blocking the possibility of any serious further progress against American racism. I repeat: This is the key issue that I believe that every black elected official should now make his central issue. This is the issue around which all other issues, I believe, pivot. This is the issue that I believe black voters should use as the basis for their evaluation of the performance of black and white elected officials.

While the debates proceed, black youth continue to be over-represented among the nation's illiterate youth. Fifteen percent of black youth 12 to 17 years of age are illiterate, while only 3.2 percent of white youth in that age group are illiterate. Where remediation has taken place as through Title I of the Elementary and Secondary School Act of 1965, school officials say they simply do not have conclusive results by which to gauge the effects of these programs. Yet, there is conclusive evidence that the public school system has not been able to ensure that its black participants will gain economic and occupational benefits. The unemployment rate among black adults is at least twice that of whites, and the rate for black teenagers is approximately four times that of white teenagers.* Black male graduates of college earn a median income of just $110 more than white male high school graduates. Blacks are 11.5 percent of the population, but are 1.2 percent of the

lawyers and judges, 2 percent of the physicians, 2.3 percent of the dentists, 1.1 percent of the engineers and 2.6 percent of the nation's college and university professors. These conditions prevail, although high school enrollment among black teenagers and their retention rates increased between 1970 and 1978 and college enrollment for blacks tripled between 1966 and 1978.

One response to this paradox is a growth in competency based education programs, which advocates claim will institute a means for students to be taught and master specific competencies which will prepare them for careers and personal development. Jenne Britell of the Educational Testing Service says that the call for minimum competency standards represents a new stage in American education. She describes the competency based education programs as the most egalitarian standard ever tried in public education. on the other hand, Hugh Scott claims that elements of some competency based education programs, such as minimum competency testing and back-to-basics, are simply the newest obstructions to the education of black and other disadvantaged Americans. A third perspective is given by William Spady who predicts that the uncoordinated competency based education movement is rapidly transforming into a bandwagon that promises to be the great American educational fad.

While many black citizens support the concept of competency standards, it is understandable that questions are being raised about the impacts of competency based education on black students and on goals for achieving educational equity. It should be determined whether competency based education programs are egalitarian movements, obstructions to education or fads. This research provides

background and processes to assist citizens in making this determination. The report discusses alternative views of educational equity, including definitions which emphasize input, process and outcome. A description of major elements of competency based education programs is given, and a framework is presented for planning and monitoring inputs, processes and outcomes in competency based education programs. The conclusion discusses ways in which new theories of educational equity can be developed from this research and used in educational policy planning.

DEFINING EDUCATIONAL EQUITY: ALTERNATIVE VIEWS

The broadest and most commonly used definition of educational equity states that equality exists when each individual is able to develop his/her potential to the fullest, regardless of socio-economic background, race, sex or religion (Milner, 1972). After presenting such general definition statements, educational researchers often proceed to discuss specific characteristics of education which they identify as central to achieving equity. Consequently, there are numerous definitions of equity in which emphasis is placed on the resources (inputs) and processes which are required to achieve equity and results (outcomes) which are said to exist when equity is achieved.

James A. Coleman (1968) has related the variety of definitions of educational equity to the evolution of the concept of equality which occurred during the development of the educational system. Initially the concept of equity was based on:

1. A free education until the time youth entered the labor force;
2. A common curriculum for all children regardless of background;
3. School populations with students of diverse background;
4. Equal resources for all schools within a given locality.

In this concept of equity, the school was only responsible for providing resources and opportunities for education (input). The child and family were not only responsible for taking advantage of

the resources and opportunity but also for the student's achievement. Coleman concludes, thus, that the school had a passive role while students and their families had to assume an active role in the education system (1972).

This concept of equality of educational opportunity existed through the 19th and early 20th centuries. As conditions in public education changed, however, the original concept was challenged. One challenge to the assumption about the common curriculum occurred in 1918, when the report of the committee of the National Education Association documented that there was an increase in the number of secondary education students and the number of students who were not college bound. Up to 1918, the standard curriculum was college preparatory, but subsequently a vocation oriented curriculum was added, creating dual curriculum tracks. The new concept was based on the premise that greater educational equity existed if a student had a curriculum designed to meet anticipated furture needs; the earlier concept made no assumptions about a student's future (Coleman, 1968).

The United States Supreme Court has assumed a significant role in defining educational equity related to the equal resource concepts. In the 1896 Plessy vs. Ferguson decision, the court challenged the original education concepts and upheld that the provision of "separate but equal" facilities was constitutional. This ruling was reversed in the court's 1954 decision in Brown vs. the Board of Education of Topeka, Kansas, with the finding that separate but equal educational resources constituted educational inequity. Concurrent with this historic decision, there was increased interest in

the results of education and, in particular, in the outcomes of education by characteristics of school problems.

The next stage in the evolution of the concept occurred when Section 402 of the Civil Rights Act required that the U.S. Office of Education conduct a survey to determine the availability of equal educational opportunities for individuals in public educational institutions by race, color, religion or national origin throughout the United States. The report, "Equality of Educational Opportunity", issued in 1966, was designed to assess five dimensions of equality of educational opportunity:

(1) racial segregation; (2) resource inputs from the school; (3) intangible resources such as teachers' attitudes toward pupils; (4) the effectiveness of resources in influencing pupil achievement; (5) inequality of outcomes as evidence of inequality of opportunity.

Despite criticisms of the methodology, the report was generally heralded as a watershed in educational outcomes, not input alone, must henceforth be central in seeking to achieve educational equity. In this regard, another challenge emerged to the existing education concepts regarding the role of the school (Mosteller and Moynihan, 1972). Equality of outcome was not viewed primarily in terms of equity in the number and quality of resource inputs, but in relation to the influence of those resources in bringing about student achievement. The school was increasingly given an active role as the result of the move from an emphasis on school resource inputs to a focus on the effects of schooling. The school's responsibility shifted from simply providing increased and equally

distributed input resources to monitoring the processes in use of resources and educational outcomes (Coleman, 1968). Through the evolution of concepts used in describing educational equity inputs, process and outcomes have been identified as key variables.

Input
Resources

Process
The use of
resources

Outcome
The results
derived from
inputs and
processes

Equity of Educational Access/Input: Economic, Human and Physical Resources

One traditional measurement of the quality of a school is based on inputs such as per pupil expenditure, degrees held by teachers, laboratory facilities, the number and kinds of teaching materials as well as the age and characteristics of school buildings. Equity of inputs is assessed by economic, human and physical resources. A component of this assessment is access to resources (opportunity) as well as their availablity. The following examples illustrate ways in which input measures are characterized.

Equal dollars - per pupil is used as an input characteristic based on every school and every school district's granting an equal amount of educational dollar resources to each pupil. In this regard, differential allocation of resources is deemed discriminatory. Favoring students with presumably high abilities may be more efficient in allocating dollars, but it is not equitable (Wise, 1968). One criticism of this assessment is that dollars do not

spend equally in different areas of a school district or the country. Since schools and children may have different needs, a rural school may need to buy more buses than an urban school or it may cost more to transport and educate a handicapped pupil than one who is not handicapped (Fleming, 1974).

While financing is a key input factor, the objectives and means for achieving equity in school finances are unclear in practice. For example, in Serrano vs. Priest and the San Antonio Independent School District vs. Rodriquez, "fiscal neutrality" was touted as a means of achieving equality of access and opportunity. The objective was that the quality of students' education would not be a function of the wealth of their school districts. Although fiscal neutrality might distribute funds evenly, problems might remain disproportionately distributed among districts. There are also arguments that financially poor districts do not necessarily have poor children in the school system and that students still might not have equal access to fiscal neutrality (Cohen, 1974). The continuing contradictions regarding the correlation between fiscal inputs, educational achievement and future life chances also persist (Coleman, 1966) (Jencks, 1972). Moreover, legislative plans to assure "equal yield for equal effort" have ignored the differentials in fiscal capacity and costs of services among districts.

The maximum-variance ratio definition is somewhat responsive to this issue in that equity is addressed in terms of approximation rather than absolutes. Equal dollars per pupil would not permit high expenditure districts to continue implementing existing programs, unless the level of expenditure was set at the same level

for all districts. Because the expense in equalizing expenditure levels would be great, the maximum difference between the amount of educational resources spent on different pupils would have to be fixed (Wise, 1968).

Another definition, which Wise terms "full opportunity", takes into consideration the differences in the abilities of students to profit from instruction. Equity under these circumstances constitutes the school's provision of those resources required to assist students in developing abilities to the fullest, with costs varying based on individual education programs. Although limited resources is an obvious shortcoming, this definition is viewed by Wise as the ultimate interpretation of equal opportunity.

In "minimum attainment" (Wise, 1968), which is similar to "full opportunity", resources would be allocated to every student until a specified level of achievement is reached. For example, when a school determines what the reading level of a certain age group should be, equity would require that resources be provided to each student until that level of equity is achieved. Some individuals may initially be reading below this level, and they would therefore require more resources, such as remedial reading teachers and special materials.

The "leveling" definition considers inputs by the school, the students and their families. The objective is to overcome the deficits of limited learning environments in the home and community by allocating more school funds to those children who bring limited individual inputs to school (Fleming, 1974).

In direct contrast to leveling, the competition definition begins with the assumption that educational resources are limited. The concern is that there should be equality in the competition for access to these resources. Van den Haag states,

> The amount of educational resources invested in anyone may differ but it should be determined by the same relevant criteria for everyone, rather than by irrelevant ones such as wealth of parents or color... (Wise, 1968).

According to Van den Haag, resources should be distributed to students according to their talents with those with the greatest ability receiving the greatest amount of resources.

The classification definition requires that there be an equal amount of educational resources available to each student within a given classification. This definition calls for grouping students by ability and presumes that the students will be placed in educational programs which are most appropriate for them. Students in a particular program are allocated the same amount of resources as all other students in that program throughout the state. The concern is for equity within educational programs rather than between them.

Currently, many states employ what has been referred to as a foundation definition of equal educational opportunity. Under this definition, a "satisfactory minimum offering expressed in dollars to be spent" must be guaranteed to each child. When a school district does not have sufficient funds to supply that minimum offering under the state mandated tax rate, the state makes up the deficiency. Education is considered equitable if each child

is ensured of receiving the minimum dollars to be spent. However, those school districts which are able to raise more than the established minimum within the specified tax rate are free to spend as much additional money as they wish. Charles Benson stated,

> High spending districts use their wealth to command the services of large numbers of superior teachers and to provide them with high quality supplies and equipment. Thus the foundation program fails by design to achieve equality of provision (Wise, 1968).

Another definition related to expenditures is referred to as tax effort equalizing by Fleming (1974). This refers to the right of local jurisdictions to determine the amount of education they are willing to finance above the minimum guaranteed level. This definition states that all districts that vote to have the same tax rate will receive the same amount of school funds. That is, the money spent on educational resources in one district is no more or less than the money spent on resources in another district which has the same tax rate. Equal funding would be achieved by state or federal governments, recapturing money from property-rich districts which raise more than the established amount of return for a given tax effort. The recaptured funds would be given to property-poor districts which cannot raise the established amount for the same tax effort.

Equal offering, as defined by Fleming (1974), states that equal resources should be available to each child, with consideration to the varying costs of living among districts and the different kinds of needs of the students. The primary concern is that "the starting point should be equitable for each child" rather than a

function of the wealth of local economy or the mood of the local taxpayers. Thus, some of the problems of fiscal neutrality which were mentioned above might be lessened.

Concepts regarding opportunity are closely related to input in access and resources. Levin (1976) defines this as "the equal probability of representative persons from different social origins achieving the same amount of educational participation (opportunity) in both a qualitative and quantitative sense." Levin further states that there are two types of barriers to equal educational participation of children from lower socioeconomic origins. One type constitutes barriers external to the school, including the lack of intellectual stimulation for a student due to low family expectations and limited family income, which may hamper the ability to provide clothing, to pay tuition charges for special courses or activities, or to pay fees for training in preparation for taking examinations. In addition, limited income may require the student to provide financial support for the family, thereby further restricting educational participation. The second barrier is often created by the structure and functioning of the educational system itself in requiring that classes be held during specific hours and in isolating education from employment. Husen (1975) describes ways in which the educational system creates barriers to educational opportunity in:

1. selecting students for specific education programs and preparation for post secondary education,
2. screening pupils for grade-repetition or for exclusion from school.

3. using grouping practices, such as "streaming" or "tracking" that tend to be biased against students with particular backgrounds.
4. using curriculum practices that do not recognize certain types of talent and students from particular backgrounds.

Levin (1976) concludes that barriers to equality of opportunity that originate outside of the school and those that are created from within appear to systematically give advantages to persons of higher social class in participating in higher education programs. This aspect of opportunity is closely related to processes which can influence educational equity.

Equity In Process

A second variable to consider regarding educational equity proceeds from the premise that the existence of equitable inputs is not sufficient to provide educational equity. A necessary factor is equity in the use of those inputs and, therefore, is concerned with the actual process of education after a child has access to education.

It is possible, of course, to measure disparities in allocations of resources, to compare ages of school buildings and count the number of books in various schools. A more challenging task is to evaluate how those resources are used as supports or barriers to educational equity. Does equity exist when students with learning difficulties are placed in classes with academically gifted students? Should there be a random process in teacher assignment to increase odds that each school would have an equitable share of teachers of varying ability and training? What attributes measure teacher sensitivity, and if, in fact, sensitivity exists but teaching is inferior, does equity exist? These are complicated questions and, in addition to measurement problems, subjectivity and differences in values make consensus difficult to achieve. The body of literature critiques various processes in terms of educational equity but falls short of defining equity in process. The characteristics of equitable processes proposed in this research include organizing and using economic, physical and human resources to allow each student to achieve maximum learning potential based on individual abilities and characteristics. In practice, this

allows handicapped students who function best with students of like characteristics to have the option of attending classes or schools for the handicapped. In a similar manner, academically skilled teachers who are unable to inspire slow learners would be placed where they could motivate maximum learning. The essential consideration in deciding on ways in which to use resources would require policy-makers to ask if the process would provide all students with an equal chance to reach individual learning potentials. Examples of process considerations follow.

The Office of Education's Survey of Equality of Educational Opportunity found that there is a type of inequality that includes "various intangible characteristics of the school" such as teacher morale, teachers' expectations of students and the level of interest of the student body. Kenneth Clark finds that these characteristics affect the child's ability to learn, and he calls for the elimination of poor teaching and negative teacher attitudes towards minority children. Specifically, he rejects the emphasis on deficiencies and special characteristics of black children and calls for the emphasis to be placed on the deficiencies and negative characteristics of schools and teachers which influence the educational process.

Ralph Tyler views equity in education as equality of meaningfulness, stimulation and the conditions for learning among various children in school. The measure of this standard of equality is to determine if there is a process through which every child learns. Tyler states that the varying abilities of children should be taken

into consideration, but that the learning process should continue even though one child's rate of learning may exceed another's. He holds the teacher responsible for insuring that learning is taking place for as long as the student remains in school, since equality is not achieved by merely having teachers allocate material and physical resources.

In contrast to the other definitions, Lesser and Stodolsky consider equity as the maximum development of special abilities that different students bring with them through provision of differential educational experiences. If adequate achievement is demonstrated in that special ability area, the school can be judged to have provided an equal opportunity for students to learn (Milner, 1972).

Melvin Turmin defines equity opportunity on the basis of processes that consider individual needs.

> Equal education doesn't mean the same education, it means equal concern...that each child shall become the most and the best that he can become...equal pleasure expressed by the teacher with equal vigor at every child's attempt to become something more than he was or equal distress expressed with equal amount of feeling at his being unable to...and equal rewards for all children in terms of time, attention, and any symbol the school hands out which stands for its judgment of worthiness... Equal rewards means...the elimination of competitive grades... One simply takes the child and teaches him for a given period of time what one thinks is important to teach. When he learns that, then he goes on to the next thing... The maintenance of the highest standards in public education is achieved by getting out of children the most that each child has in him. Any other notion of high standards fails to take into account the different capacities for development and growth of large numbers of children. Equality of education...is the only device that I know of for the maintenance of high

> standards, as against the false measure that relies on the achievement of the elite minority of the school (Milner, 1972).

In addressing means of educating ethnically diverse populations, Edgar Epps (1979) stated that an appropriate education for all children requires the elimination of European biases in educational theory and processes. His definition of equity necessitates the inclusion of multi-ethnic experiences in setting values and goals for the learning process. He contends that to achieve greater equity, educational systems must accept and respect diverse populations, instill in each student self-acceptance and pride in his/her heritage and promote acquisition of knowledge and skills for community development.

Sorensen (1978) studied the organizational procedure which includes assignment of pupils to a particular grade or classroom as well as tracks, streams and ability groups and found that organizational differentiation determines student's educational attainment by defining a set of career trajectories. It governs academic performance and student's educational process by exposing students to different curricula, different learning and socialization environments as well as instructional groups.

During the 1950's it was the assumption of many educators that quality education was best achieved by grouping children according to ability and background, the practice called tracking or streaming. Research disclosed, however, that adaptations were made in the course of instruction given to lower track children so that they were required to do less work. Most often, lower-income

and minority youth were placed in the lower tracks or streams, and, in fact, subtle procedures such as career groupings were often substituted for more obvious tracking lables.

In summarizing the results of tracking, researchers have found: The system is structured through tests, reward systems and required behavior patterns to allow children of the middle class to do well and to filter out the poor (Carnoy 1974; Gintis 1971; Dreeben 1968). At each grade level, curriculum is "modified" to teachers' images of what children can be expected to do (Stein 1971). Moreover, pupils in lower track courses are further demoralized by the widespread grading policy in high schools. Lower track students often cannot receive a grade higher than "C" or "B" no matter how hard they try, nor how completely they master the material available to them (Hickerson 1966), and, in a related organization procedure, as soon as the child reaches sixteen years of age the teacher's task is lightened. The simplest way of teaching the child is to get him out of school through the insidious "incentive or social promotion" practice (Stein 1971). As Hickerson (1966) states, "Children of deprived background who do manage to graduate from high school are seldom better off for completing this ordeal because schools have equipped them with few saleable skills" (cf., Ogbu 1974). (See The Desegregation Literature: A Critical Appraisal The National Institute of Education. HEW 1976, p. 89)

In related research, Cicourel and Kitsuse (1972) found that the use of labels such as "college material," "academic problem," and "troublemaker" became a primary source of data for understanding

how students are classified and distributed among various categories of high school records.

> Cicourel and Kitsuse also found that ability grouping is significantly related to the distribution of educational opportunities among the student population and that the school serves as a clearinghouse for other community agencies that come into contact with the adolescent. The school, therefore, occupies a strategic position in the organization and control of the adolescent's status position. The authors conclude that the day-to-day activities of school personnel effectively control the access of students to the limited number of curricula available, particularly those most instrumental for upward mobility, i.e., the college preparatory curriculum.

Upward mobility may be defined in several ways and is an element in the final variable in characteristics to consider in educational equity. The ultimate concern is the outcome of the inputs and processes in education.

Equality of Educational Results/Outcomes

In equality of educational results, it is not only the educational resources and processes that are important, but the level of effectiveness in providing skills, behavior and attitudes which are considered to be productive in later life (Levin, 1976). This form of equity exists, according to Levin, when "representative members of each sex and social class obtain similar educational results from the educational development for each year of schooling and for their overall educational career".

Coleman's survey of Equality of Educational Opportunity 1968 considers two aspects of equity of results. One states that equality of opportunity is equal consequences (outputs) of the school for individuals with equal backgrounds (inputs). The second definition

states that equity is achieved only when the results of schooling are the same for racial and religious minorities as for the dominant group.

Edmund Gordon defines equity in education as the achievement of basic competencies in all pupils (Milner, 1972). These competencies are mastery of basic communications skills, the management of knowledge, problem solving, employment, leisure and continued education and self-management. Although an educational experience can and should enable many persons to go beyond the achievement of these skills, it cannot be considered equitable unless it enables most students to reach this "survival or participation" level.

Levin concluded that equality of participation and equality of results are interwoven. Students who show better educational results are more likely to have options to proceed further in school and to participate in the most prestigious institutions of the educational system. He states that the only measures of educational results that have been consistently assessed are achievement test scores. Students with higher socioeconomic status show higher test scores, but the evidence has shown that achievement tests tend to underestimate students with lower socioeconomic backgrounds. Levin further maintains that equity exists when the educational system intervenes in the social system in such a way that there is no systematic relation between a person's social origin or sex and his ultimate social attainments (Levin, 1976). This would mean that there would be no statistical correlation between

an individual's ascribed (inherited) status and his/her achieved status as a result of education (Milner, 1972). This perception of equity evolves from the belief of individuals such as Horace Mann that education is America's instrument of social progress and reform. Such a theory presumes that inequalities exist in society and that education is the means for overcoming them. According to Mann, education is a means of social mobility and a way of eliminating poverty. In his words, education is "the balance wheel of the social machinery."

Mann's thesis, then, is that educational inequality is the cause of economic inequality among people. In analyzing educational results based on this view, there should be a reduction or elimination of economic inequalities where educational inequalities have been reduced or eliminated. However, statistics do not show this to be the case.

Robert Hill (1979) stated,

> Positive correlation of higher education attainment with increased employment opportunities fails to hold up when one compares the unemployment pattern of black youth with that of white youth with similar levels of education.

In general, black youths out of school have an employment rate that is three times that of white youths out of school--28.0% and 9.9% respectively. The relationship is the same even when the educational attainment of both groups is equal. The unemployment rate of black high school graduates in 1977 was 24.6%, while the jobless rate for white high school graduates was 8.8%. Blacks with some college education had an unemployment rate of 21.4%,

compared to 6.4% for whites. Even more astounding is the fact that white high school dropouts have lower unemployment rates (16.7%) than black youths with some college education (21.4%) and about the same jobless rate as black college graduates (16.5%).

Hill states that in spite of some gains in educational attainment by blacks--the percentage of blacks between the ages of 25-29 who were high school graduates increased from 23.4% in 1950 to 76% in 1977 (National Urban League, Inc. 1979)--the unemployment gap between blacks and whites today is the widest it has ever been.

These data illustrate problems with current theories of educational equity in terms of results and outputs. The problem is manifested on at least two levels. First, educational outcomes might be assessed in terms of the actual ability to reap the benefits of employment, higher education or other societal awards. In this regard, educational certification may be ignored or discounted by employers, institutions of higher education or social systems. On the second level, the educational results and outcomes may be at variance with what is acceptable or desired by employers, institutions of higher education or within societal goals.

Persell (1977) suggests that any theory of educational outcomes must examine education in its wider social context and that it "must indicate how the social context of education relates to educational practices and forms, how those educational features influence the participants in the situation and with what consequences."

Persell draws from Marxist and Weberian ideology which emphasize the effects of the wider social context. She uses their theories of structural dominance to explain the means by which the

larger society effects educational outcome. The concept of structural dominance presumes that societies are stratified and that those people in positions of power and privilege use their resources to sustain themselves in those positions. The privileged must dominate those subordinate to them in order to maintain control. One means by which this control is maintained is through the legitimation of power,

> ...the structural basis of stratification in a society and the legitimizing ideologies used by that society are crucial determinants of the degree to which the society relies upon the educational system as a mechanism for legitimizing social inequality (Persell 1977).

Stratification in the United States is largely based on economic, occupational and racial factors. Persell suggests that the United States relies heavily upon the educational system to recreate and legitimate its structures of dominance. The structure of dominance in the society and the resulting societal ideology and interests determine educational procedures as well as goals and values. Both the ideology of the dominant society and the educational system itself influence and determine teachers' expectations and their resulting educational interaction with different students. All of these factors, i.e., societal structures of dominance and their ideologies, educational concepts, structures and practices influence students' academic achievement and their self concepts.

Weber postulated that belief systems and goals of the dominant structure also determine what types of educational achievement will be measured and the means of measurement. According to Persell, the

means by which educational effects are defined and measured in influential studies such as Coleman's provide a restricted view of education. For example, the Coleman study used evaluations that measured outcomes by scores on standard cognitive achievement tests, although there are many aims of education including cognitive and non-cognitive objectives. This is largely because the ideology of the dominant social structure maintains that outcomes in economic development and success are largely dependent on the development of cognitive skills, and those who are the most proficient in these skills achieve society's benefits and rewards. Cognitive development is increasingly being measured by standardized tests as one evidence of educational outcomes. The design of these tests may, however, conceal the differences between school characteristics and their impact on educational outcomes and maximize the differences among students.

Although problems have been associated with testing as a means of evaluating since its inception, use has continued to spread throughout school systems. Testing was first adopted when schools were called upon to prepare individuals for the stratified work world, and now many policy analysts contend that it is used to legitimize differences among people and to serve the interests of the dominant society in certifying educational outcomes. This certification is frequently made regarding awarding credentials for employment or entrance to institutions of higher education. In his examination of non-government organizations' roles affecting employment opportunities for minorities, Bernard E. Anderson found

that many minority applicants do not perform successfully on the battery of entry tests and that the tests are often imposed to screen out racial minorities. The consideration which proceeds from such a statement relates to the responsibility of the school regarding screening, certifying or awarding of credentials by post secondary school institutions.

Gordon (1966) concludes that such a consideration must be related to the purpose of education in a democratic society. "If that purpose is to broaden opportunities for meaningful participation in the mainstream of society through the development of necessary skills and credentials, then educational opportunity is unequal unless it serves that purpose for all learners." Inputs and processes can lead to the possession of necessary skills and credentials, but factors outside of the school's immediate sphere of influence may prevent participation in the mainstream of society. In such instances, educational equity in outcomes does not exist, because an important facet of the outcome variable includes participation.

Interlocking relationships derive from these characteristics of educational equity, illustrating that any one of these characteristics cannot be a satisfactory measure of educational equity in the absence of the other two. The resources must include adequate human, physical and economic resources, and these must be organized and allocated based on stated equity goals and objectives, which lead to students' maximizing their individual potential in academic performance and participating in societal institutions.

These three characteristics provide the principles on which to define educational equity.

The definition of educational equity is not static, but evolves from a goal oriented process. The goal is to have each child achieve his or her maximum learning potential and the opportunity to participate in societal institutions. This is accomplished through the use of resources and processes that will produce the outcomes required to meet the goal. Conceptually, it would appear that education programs which are designed to increase student competency would complement goals for educational equity, but it is necessary to look at these programs in more detail to see if, indeed, this is true.

COMPETENCY BASED EDUCATION PROGRAMS: AN OVERVIEW

When the state of Oregon adopted competency requirements for high school graduation in 1972, that action heralded a revitalized national movement toward competency based education. Currently, over 36 states have started competency programs, and many local districts have initiated procedures requiring minimum student performance in selected skills and subject areas to qualify for promotion or graduation.

Although minimum competence requirements have been a part of the policy in many school districts since the early 1900's, the recent movement is sparked by several public policy issues. Bernard C. Watson states that support for public education has declined during the past decade and cites as probable influences the decline in discipline, poor student performance, a decline in academic standards and inadequate financial support. In assessing the quality of education in urban areas, Watson contends that the education in urban schools is nothing short of a scandal, with reading levels up to five years below the national average (Urban League, 1980). The statistical report, The Condition of Education, 1979 edition, states that the approval of school bonds ranged from a high of 68 percent in 1968 to a low of 46 percent in 1975 and speculates that the drop may be indicative of a decline in public willingness to finance education. The public's action may be directly related to their attitude toward public schools. For example, a Gallup and Kettering Foundation poll asked respondents to grade the schools in their community. Only 10 percent of the students rated the schools "A";

45 percent gave a rating of "B", and 44 percent gave "C" or lower ratings (there was a one percent don't know/no response). In the same poll, 15 percent graded the schools as "B", and 47 percent gave "C" or lower ratings (2 percent were categorized as don't know/no response).

Another group, the Council for Basic Education, charged that the quality of education is deteriorating. In analyzing the reasons for declines on Scholastic Aptitude Tests over the last twelve years, the Council's report said a significant number of youth are leaving school with scandalously low levels of academic achievement (CBE Bulletin, October, 1975).

These and other issues which have increased interest in competency based education have been discussed in numerous news media. The February 28, 1977 issue of Time Magazine carried an article entitled "Devalued Diploma." The June, 1978 Federal Education Project's Newsletter devoted several issues to competency and discussed factors which have influenced the movement. In the December 9, 1979 issue of the New York Times, New York School Chancellor Marchiarola and former U.S. Commissioner of Education, Harold Howe II, discussed ways to overcome the "public's weariness of educational failure."

As accusations are made regarding educational failure, there are numerous educational policy-makers and administrators who charge that social promotions and the lack of intellectual rigor in schools resulted from demands of community groups and political leaders; they contend that schools are now being blamed for problems which were

created by ill-informed consumers of education, and they seek redress. There are also many parents and students who have challenged school systems based on their contentions that many students have completed twelve years of education, but they have not acquired basic skills. In addition, numerous scholars are conducting research to reinvestigate the role of education as a major vehicle for access to the benefits and rewards in a democratic society, including consideration of how high school graduation certifies students for managing their lives in a complex society.

The Southeastern Public Education Program (1979) concluded that collective experiences have created a concern about competency.

> Many parents are disturbed when they find their children cannot read, write or compute at a level the parents think is necessary.
>
> Many educators are concerned because high school students' scores on standardized tests such as the Scholastic Aptitude Test are declining.
>
> Many college instructors are upset when they find some students can't write a coherent paragraph.
>
> Many employers are angry when young job applicants can't fill out an application, follow simple written directions or read well enough to perform even simple job tasks.

Paul Parks (1978) of Michigan has completed research which shows that no two states have identical programs, and the differences span the definitions of minimal competence, the political jurisdiction which administers standards, the grade at which competency is measured, the use of tests alone or other assessment tools, forms

of communication with the public and ways in which test results are used.

Hathaway (1976) emphasized process in competency based education and described three major elements: (1) the communication to the public, to one another, and to students of a rationalized vision of what it is we hope that the students will learn; (2) a focusing of instructional support and learning environments upon these educational outcomes, and (3) the formative and summative evaluation of student progress toward the outcomes or competencies, with an eye to competency refinement, program improvements, modification of learning environments and student certification.

Spady (1977) considers both process and outcomes.

1. There need to be outcome goals;
2. There need to be instructional means put into place that are highly responsive to those outcome goals;
3. There need to be evaluation means, techniques, procedures, etc. in place that are responsive both to the outcomes goals and to the instruction the student receives.

Arthur Wise (1978) relates minimum competency programs to the goals of giving value and credibility to public school diplomas and ensuring that minority students acquire basic skills, but Harold Howe (1978) emphasizes two categories of testing programs: those designed to evaluate instructional programs or to give a composite of remediation needs and those designed to determine if students will be promoted or granted diplomas.

Programs and interpretations of competency based education vary, therefore, from simply defining competency based education as back to basics and placing an emphasis on reading, writing and computation to describing competency based education as performance based education built around three components: learning goals, measurement of goal attainment, and certification of goal attainment. Other definitions add a prescriptive element and emphasize the results which are derived from students' gaining skills and knowledge to become functioning contributors to society, with results measured in terms of benefits to taxpayers on their investment in public education.

The Southeastern Public Education Program's manual to introduce citizens to minimum competency programs summarizes the programs as organized efforts to make sure public school students are able to demonstrate their mastery of certain minimum skills needed to perform tasks they will routinely confront in adult life (1979).

Despite the varied definitions, competency based education programs can be assessed vis a vis equity by studying program input, processes and outcomes as illustrated in the following examples.

Inputs - As competency based education programs have been evaluated, charges have been leveled that many districts are attempting to introduce competency based education programs using existing resources. The implication is not simply that a new curriculum is needed in competency based education, but that resources are needed to develop and test the curriculum and to train persons to use the curriculum.

These needs mount in the face of declining school budgets and a concommitant retrenchment in programs and staffing. One resource alternative has been to organize teacher committees to develop behavioral objectives, but this has often been described as a fruitless public relations exercise which has simply exascerbated teacher frustration.

Consultants have also been considered as an efficient way to supplement scarce resources in the school district. In many instances, the consultants lack sensitivity to needs at the local level. For example, some consultants have recommended sophisticated techniques for data gathering, such as the Delphi process, and have included procedures which cannot be implemented by school systems with the available resources. Of concern also is the availability of an adequate number of teachers with the appropriate training to provide instruction or remediation.

Process - Inputs are of little value if they are not used in a process that will support the goal of equity. This concern is set forth in the Federal Education Project newsletter (1978) in a discussion of potential problem in competency programs. FEP observations that inadequate phase-in processes, matching of test and instruction, procedures for remediation and monitoring of racial consequences will be detrimental to achieving equity. Avoiding negative results requires a planning process which considers the

timing of each program phase based on the availability of resources and on the length of time they have been in place. For example, in May, 1980, the California Legislative Black Caucus opposed legislation on proficiency exams on the grounds that unless there were a delay of three years, students who have been exposed to racially and economically segregated schools would be penalized. A National Education Association and Florida Teaching Professionals panel concluded that Florida's minimum competency testing processes had many shortcomings, in that some items on tests were not taught in the schools; cut off scores were arbitrarily set; students and parents were not given program information; schools did not have adequate technical assistance and schools were rushed into the program with insufficient preparation (Scott, 1979). A phase-in period provides time for teacher training and orientation to CBE and for making decisions about what competency standards should be used, how they are to be measured and what use will be made of results. Tests have become an important part of the CBE process, raising extensive debate along many lines, including whether criterion-referenced or norm-referenced tests are more equitable. A number of CBE programs use an evaluative method known as criterion-referenced testing. Criterion-referenced testing evaluates the achievement of an instructional objective by describing objectives in behavioral terms, as compared with present

absolute standards or criteria (Laosa, 1978). On the surface, this method does not appear to present the same problems of bias and unfairness to minorities as the norm-referenced tests which compare students with one another. In criterion-referenced tests, evaluation is closely tied to instruction. In spite of its apparent legitimacy, criterion-referenced testing may still pose equity problems for minorities, albeit less obvious ones. Even if the criterion reference is directly tied to instructional objectives, the question of who chooses the criterion is significant (Drew, 1973).

A. Graham Down (1979) maintains that minimum competency testing offers more hope for realizing the educational aspirations of minorities than any public school policy since the 1954 decision in Brown v. Topeka Board of Education. Yet, the staff at the Center for Law and Education found that the potential for racial and socioeconomic discrimination has become apparent as more states implement competency based education programs which include competency testing. In fact, the National Association for the Advancement of Colored People's Legal and Educational Defense Fund has instituted legal challenges to competency testing in Florida and North Carolina.

Procedures for using test results must be examined to determine if they by intent or consequence produce re-

segregation. Results based on past effects of unequal education can cause blacks and other minorities to score low on tests and then be placed in racially isolated remedial groups. Concerns that CBE is a new vehicle for discrimination are reflected in the following comments by black citizens:

Bernard McKenna of the National Education Association:

"If we continue to move along the proficiency test route, we will end up with segregated classrooms all over again."

Moses Know, Greensville County, Virginia NAACP President:

"They've stopped fighting integration, but now our children are segregated within school buildings."

The importance of these concerns is illustrated by comparing processes which can be used when students do not meet the competency standards.

Illustrative Options A

prevent graduation or promotion until the competencies are gained

encourage the student to drop out

grant the student a special diploma or certificate of attendance

certify the student for a slow learners or limited ability track

Illustrative Options B

provide continuing diagnosis of individual's learning potential

assess the learning problems and provide assistance to reach individual's learning potential

organize learning goals around individual progress rather than time periods

collaborate with students, their parents and school personnel to decide on the appropriate learning situation

Periodic monitoring of how resources are being used will provide an indication of what outcomes might be expected.

Outcomes - The outcomes resulting from the inputs and processes indicate the status of competence attainment. In 1979, it was predicted that 7,000 of New York City's 60,000 seniors would fail to qualify for diplomas as a result of not passing a state-wide test in basic skills. The majority of the students who are failing are black. In the fall of 1978, 18 percent of Virginia's tenth-graders failed to perform at minimum required competence levels. The failure rate for blacks was four times that of whites and double the rate of other minorities, such as Asians. Such alarming statistics may not provide evidence that competency based programs should be eliminated. In fact, these data could be the basis for advocates of educational equity to examine inputs and processes to determine why disproportionate numbers of minorities fail. In a similar manner, if the gap between black and white achievement narrows and this is not reflected in entrance rates to employment or to institutions of higher education, this also gives advocates of educational equity

a body of information to challenge the disparities between the groups.

These positive uses of educational outcome data are important, since there is some indication that minorities support the goal of achieving excellence in education, although they fear that equity is sacrificed in pursuit of that goal. A 1979 Gallup Poll showed that 90 percent of all individuals, regardless of race, favored establishing minimum standards for promotion and for graduation, and 80 percent agreed that children who fail to meet minimum competencies should be given remedial education. Consensus was lacking, however, on who should develop instruments for measuring the achievement of minimum competency. Moreover, one concern of minorities is that schools will focus exclusively on testing and that students who fail will be tracked, encouraged to drop out, promoted or graduated despite deficiencies or awarded certificates of attendance rather than diplomas.

The fundamental concepts of competency standards can be used by blacks to demonstrate how CBE programs support or prevent equity. A possible strategy would be to use the current public interest in CBE programs to highlight whether and how the issue of equity is being addressed. For example, they could set educational goals which are directed toward achieving specific outputs, provide financial, physical and human resources to work toward achieving

the outputs; and establish processes to organize and use the inputs in ways that lead to attaining the outputs. This approach encompasses the three views of equity described above and permits advocates of equity to assess how CBE programs either support or prevent achieving educational equity.

Causality and consistencey can be examined in relationship to equity by using the Competency - Equity Nexus Table. Based on an established educational equity goal, it can be determined if the inputs provide means to a process which will facilitate mastery of skills and knowledge leading to educational equity. For example, if the desired outcome is the mastery of specific skills, a process for giving certificates of attendance will not be a means to that end. If there will be contractions in dollar inputs because of budget cuts, it is probably inconsistent to plan a process to institute a large scale curriculum revision process. The nexus can also be used to clarify whether indicators and sources of data exist to assess what is taking place in the CBE program. Advocates of educational equity can study outcome indicators and the means of verification as an essential step in determining whether the program will support or hinder the attainment of equity. They can pose questions about the use of certain tests as a means for students to demonstrate mastery of information and skills; entry rates to employment and institutions of higher education can be examined as one indication of educational outcome. In fact, such data can be used in studying whether mastery of certain information and skills

is sufficient to improve employment and educational opportunities or whether other factors are more significant.

COMPETENCY - EQUITY NEXUS

GOAL	INDICATORS	MEANS OF VERIFICATION
Educational equity	Data on the quality of life	Census reports Newspapers Reports of Civil Rights Organizations
OUTCOMES Mastery of specified information and skills	Data on information and skill attainment; revisions, inputs and processes; entrance rates to employment and higher education	Tests Census reports Bureau of Labor statistics College records
PROCESSES for: developing competences, establishing what outputs are to be attained, determining how they will be measured, measuring outputs, using results	Data on the decision making processes, staff training, the teaching and learning process, measurement instruments and procedures	School records and reports
INPUTS Resources which will be allocated to implement the process	Data on the quantity and kind of allocations for financial, physical and human resources	School records, reports, budgets

This matrix is an adaptation of the U.S. Agency for International Development's logical framework.

CONCLUSION

While many observers of the competency based education trends predict that these programs will restore confidence in public education, critics express doubt. A perplexing policy issue has emerged in which school districts are criticized because students are denied diplomas based on single tests and some students simply receive certificates of attendance. On the other hand, there are several law suits and numerous informal charges that schools are awarding diplomas to illiterate students.

Harold Howe II, a Ford Foundation vice president, says a possible result of the competency movement is that

> we must all live with the consequences of a group of young people rejected by our educational system and our economic system and embittered by their rejection in the name of improving educational standards.

This need not occur; significant progress can be made toward improving educational standards when the standards are evaluated in terms of educational equity as set forth in this study.

By using the matrix, minorities and other advocates of educational equity can examine potentially negative impacts of CBE such as: certificates of attendance which are of no value in the job market; tracking which can become a code word for racial segregation; and pupil accountability for learning without shared responsibility of school personnel and administrators. The information which is compiled to analyze competency based education from a black perspective can also benefit a wider audience. Administrators, board members and teachers can benefit by having a set of

expected outcomes and a systematic approach to relating inputs and processes with the outcomes. Parents and students will have increasing opportunity to assess progress in terms of individualized learning programs. Businesses and institutions of higher education will have to devote less time and money to remedial training, and taxpayers can have some assurance that schools are maintaining learning standards. The new data base which is developed by using the CBE - Equity Nexus can contribute to theory building, the understanding of what resources are needed and how they should be organized to achieve specific educational equity outcomes.

REFERENCE MATERIALS

Anderson, Bernard E., "Private Action in Support of Equal Employment Opportunity." Prepared for the Equal Opportunity Symposium - Rutgers Law School.

Becker, James, Education for a Global Society; Phi Delta Kappa Education Foundation: Bloomington, 1973.

California Legislative Black Caucus; AB-3369 - Disproportionate Impact of Proficiency Exams on Minority Students; May, 1980.

Clark, Kenneth, Unpublished address delivered at the third annual dinner of the Joint Center for Political Studies.

Carver, Ronald P., "The Coleman Report: Using Inappropriately Designed Achievement Tests," American Educational Research Journal; Vol. 12, No. 1, 1975.

Cole, M., and Bruner, J. S., Cultural differences and inferences about psychological processes, American Psychologist, 1971, 26; 867-876.

Cole, Michael, et al, The Cultural Context of Learning and Thinking; Basic Books: New York, 1971.

Coleman, James A., "The Concept of Equality of Educational Opportunity," Harvard Educational Review; Vol. 38, No. 1, 1968.

Coleman, James Samuel, Equality of Educational Opportunity, Washington: U.S. Government Printing Office, 1966.

Council for Basic Education Bulletin, "College Entry Test Scores Decline," October 1975.

Cremin, Lawrence A., The American Common School: An Historic Concept; Columbia University: New York, 1951.

DeLone, Richard H., Small Futures; Harcourt, Brace and Jovanovich: New York, 1979.

Down, A. Graham, Implications of Minimum - Competency Testing for Minority Students, ERIC Clearinghouse on Tests, Measurement, and Evaluation. Educational Testing Service, Princeton, New Jersey.

Drew, C. J., "Criterion-Referenced and Norm-Referenced Assessment of Minority Group Children," Journal of School Psychology; Vol. 11, 1973.

Epps, Edgar G., Education and Ethically Diverse Population: Columbia University: New York, 1979.

Federal Education Project Newsletter, "Minimum Competency Testing: What It Can Mean For The Disadvantaged (Part II)," June, 1978.

Fleming, Virginia, The Cost of Neglect The Value of Equity; Southern Regional Council: Atlanta, 1974.

Premer, John, Setting and Evaluating Competency Standards for Adwarding High School Diplomas, paper presented at the National Council on Measurement in Education, New York City, April, 1977.

Gordon, Edmund W., Compensatory Education for the Disadvantaged; College Entrance Examination Board: New York, 1966.

Green, Robert L., Griffore, Robert J., "School Desegregation, Testing, and the Urgent Need for Equity in Education," Delivered at the Association for Supervision and Curriculum Development Conference, Miami, Florida, March, 1976.

Hill, Robert B., The Widening Economic Gap; The National Urban League: Washington, 1979.

Husen, Torsten, The Learning Society; Methuen and Company: London, 1974.

Jencks, Christopher, Inequality: A Reassessment of the Effect of Family and Schooling in America; Basic Books: New York, 1972.

Laosa, L. M., "Nonbiased Assessment of Children's Abilities: Historical Antecedents and Current Issues in Oakland," Psychological and Educational Assessment of Minority Children; New York.

Levin, Henry M., Equal Educational Opportunity in Western Europe: A Contradictory Relation; Stanford University: Stanford, 1976.

Lewis, Ronald H., "Do Minorities Embrace the Concept of Minimum Competency?" ERIC Clearinghouse on Tests, Measurement, and Evaluation. Educational Testing Service, Princeton, New Jersey.

McClung, Merle Steven, "Competency Testing: Potential for Discrimination," Clearinghouse Review, September, 1977.

McClung, M. S., "Are Competency Testing Programs Fair? Legal?" Phi Delta Kappa, Vol. 5, 1978.

Milner, Murray Jr., The Illusion of Equality; Jossey - Bass: San Francisco, 1972.

Mizell, M. Hayes, Minimum-Competency Programs, Protected Classes and Federal Agencies. ERIC.

Mosteller, Frederick and Moynihan, Daniel P., On Equality of Educational Opportunity; Vintage Books; New York, 1972.

National Center for Education Statistics, The Condition of Education 1979 Edition.

National Council on Measurement in Education - Symposium at 1979 Annual Meeting, Implications for Minority Groups of the Movement Toward Minimum Competency Testing. ERIC.

National Urban League, Inc., The State of Black Politics, New York, 1980.

The National Urban League, The State of Black America; National Urban League: Washington, 1979.

Persell, Caroline Hodges, Education and Inequality; Free Press: New York, 1977.

Reilly, Wayne, "Competency - Based Education: Pros and Cons," American Education, April, 1978.

Savage, David G., "Minimum Competencies - The Oregon Approach," Educational Leadership, October, 1978.

Scott, Hugh J., Minimum - Competency Testing: The Newest Obstruction to the Education of Black and Other Disadvantaged Americans. ERIC

Southeastern Public Education Program, "A Citizen's Introduction to Minimum Competency Programs for Students," March, 1979.

Spady, W. G., "Competency - Based Education: A Bandwagon in Search of a Definition," Educational Research, Vol. 1, 1977.

Summers, Anita A., and Wolfe, Barbara, Which School Resources Help Learning Efficiency and Equity in Philadelphia Public Schools; The Federal Reserve Bank of Philadelphia: Philadelphia, 1975.

Wise, Arthur E., Rich School, Poor School; the Promise of Equal Educational Opportunity; University of Chicago: Chicago, 1968.

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